

PATENT COOPERATION TREATY

PCT

NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Commissioner
US Department of Commerce
United States Patent and Trademark
Office, PCT
2011 South Clark Place Room
CP2/5C24
Arlington, VA 22202
ETATS-UNIS D'AMERIQUE
in its capacity as elected Office

Date of mailing (day/month/year) 06 June 2001 (06.06.01)	Applicant's or agent's file reference 1126.P001PCT
International application No. PCT/SG00/00143	Priority date (day/month/year) 15 September 1999 (15.09.99)
International filing date (day/month/year) 12 September 2000 (12.09.00)	Applicant FONG, Fatt, Chee

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:

05 April 2001 (05.04.01)

☐ in a notice effecting later election filed with the International Bureau on:

2. The election ☒ was

☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No.: (41-22) 740.14.35	Authorized officer Zakaria EL KHODARY Telephone No.: (41-22) 338.83.38
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PATENT COOPERATION TREATY

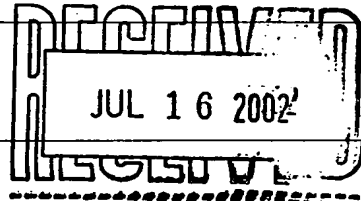
PCT

REC'D 28 MAR 2002

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 1126.P001PCT	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/SG 00/00143	International filing date (day/month/year) 12 September 2000 (12.09.2000)	Priority Date (day/month/year) 15 September 1999 (15.09.1999)
International Patent Classification (IPC) or national classification and IPC IPC ⁷ : G06F 17/60		
Applicant FIRST CUBE PTE LTD. et al.		



1. This international preliminary examination report has been prepared by this International Preliminary Examination Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 4 sheets, including this cover sheet.

☒ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 4 sheets.

3. This report contains indications relating to the following items:

- I. ☒ Basis of the opinion
- II. ☐ Priority
- III. ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV. ☐ Lack of unity of invention
- V. ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability: citations and explanations supporting such statement
- VI. ☐ Certain documents cited
- VII. ☐ Certain defects in the international application
- VIII. ☐ Certain observations on the international application

Date of submission of the demand 05.04.2001	Date of completion of this report 28 February 2002 (28.02.2002)
Name and mailing address of the IPEA/AT Austrian Patent Office Kohlmarkt 8-10 A-1014 Vienna Facsimile No. 1/53424/200	Authorized officer FASTENBAUER Telephone No. 1/53424/447

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/SG 00/00143

I. Basis of the report1. With regard to the **elements** of the international application:*☐ the international application as originally filed☐ the description:

pages _____ as originally filed

pages _____ filed with the demand

pages _____ filed with the letter of _____

☒ the claims:

pages _____ as originally filed

pages _____ as amended (together with any statement) under Article 19

pages _____ filed with the demand

pages 28-31 filed with the letter of 21 February 2002 (21.02.2002).☐ the drawings:

pages _____ as originally filed

pages _____ filed with the demand

pages _____ filed with the letter of _____

☐ the sequence listing part of the description:

pages _____ as originally filed

pages _____ filed with the demand

pages _____ filed with the letter of _____

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is:

☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).☐ the language of publication of the international application (under Rule 48.3(b)).☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:☐ contained in the international application in printed form.☐ filed together with the international application in computer readable form.☐ furnished subsequently to this Authority in written form.☐ furnished subsequently to this Authority in computer readable form.☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.4. ☐ The amendments have resulted in the cancellation of:☐ the description, pages _____☐ the claims, Nos. _____☐ the drawings, sheets/fig _____5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.
PCT/SG 00/00143

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability: citations and explanations supporting such statement

1. Statement			
Novelty (N)	Claims	2-14	YES
	Claims	1	NO
Inventive step (IS)	Claims	2-14	YES
	Claims	1	NO
Industrial applicability (IA)	Claims	1-14	YES
	Claims		NO

Citations and explanations (Rule 70.7)

This written opinion is based on the claims 1-14 filed with the letter of 21.2.2002.

The following documents have been cited in the Search Report:

D1: DE 29807184 U1

D2: DE 4130033 A1

Industrial applicability is given.

The amended and new claims filed with the letter of 21.2.2002 contain some features which were not contained in the originally claims 1-9.

In the letter of 21.2.2002 the applicant mentions that ... *the two cited prior art ... do not have the provisions to allow the customer to return goods to a vendor...* However Document D1, DE 298 07 184 U1, shows an electronic service box enabling the customer e.g. to place his laundry in the box section for laundry (11). This laundry is picked up by the laundry service. This corresponds to what is described on page 12 of the present application.

Hence D1 shows a system adapted to send goods from the customer to a service/vendor. To adapt this feature of D1 to also "return goods" to a vendor seems obvious for a person skilled in the art, thus D1 also facilitates two-way transactions between the customer and the vendor or a delivery agent/person. So, the features of the newly filed claim 1 are known or suggested by the documents cited in the search report.

Furthermore the new feature of the amended claim 1 "wherein said system controller *is adapted to facilitate* leasing of said locker units by registered parties for delivery or pickup of good, said registered parties including a customer, a vendor and a delivery agent" is not drafted in "terms of the technical features of the invention" (Rule 6.3(a)), but only contains features relating to commercial and non-technical matters. The formulation "is adapted to" does not fulfil the

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.
PCT/SG 00/00143

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: **Box V (page 1)**

requirement for a claim of being "clear and concise" (Article 6) as it only says what goal should be achieved, and not how it is achieved.

In the case it would be obvious for a person skilled in the art to achieve the goal "is adapted to" the claim would present a lack of inventive step; in the case it would not be obvious for a person skilled in the art how to reach this goal, the claim would not be "clear and concise".

Hence, all the features of new claim 1 of the present application are known or suggested by the above documents.

The features claimed in dependent claims 2-5, and the claims 6-14 involve an inventive step.

21. Feb. 2002

CLAIMS**I Claim:**

1. A system for facilitating a delivery and pickup of goods comprising:
a plurality of locker modules, each of said locker modules having a plurality of locker units, a locker controller, a user interfacing device, a user-identifying device, and a remote receiving and transmitting device;

a system controller having an application server, a database server, and a remote receiving and transmitting device for communicating with said remote receiving and transmitting device of said locker modules;

a customer's PC terminal communicably connected to said system controller;

a vendor's PC terminal communicably connected to said system controller; and

a delivery agent's PC terminal communicably connected to said system controller;.

wherein said system controller is adapted to facilitate leasing of said locker units by registered parties for delivery or pickup of a good, said registered parties including a customer, a vendor and a delivery agent.

2. The system as recited in claim 1, wherein said system controller is further adapted to provide login identification to each of said registered parties based upon particulars received from said registered parties, said login identification being associated with a smart card and a pin number of each of said registered parties.

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3. The system as recited in claim 2, wherein said system controller is further adapted to provide said pin number and information on said smart card to said locker controller for said leasing.

4. The system as recited in claim 1, wherein said system controller is further adapted to enable said registered parties to obtain status of said delivery or said pickup, said status comprising a delivery record of a particular delivery person and transaction details.

5. The system as recited in claim 1, wherein said system controller is further adapted to allow special access to said locker unit by said registered parties when a wrong delivery or a wrong item is placed into said locker unit.

6. A method of making a delivery of a good to a customer using a system for facilitating a delivery and pickup of goods comprising,

a plurality of locker modules, each of said locker modules having a plurality of locker units, a locker controller, a user interfacing device, a user-identifying device, and a remote receiving and transmitting device;

a system controller having an application server, a database server, and a remote receiving and transmitting device for communicating with said remote receiving and transmitting device of said locker modules, wherein said system controller is adapted to facilitate leasing of said locker units by registered parties for delivery or pick-up of a good, said registered parties including a customer, a vendor and a delivery agent;

a customer's PC terminal communicably connected to said system controller;

a vendor's PC terminal communicably connected to said system controller; and

a delivery agent's PC terminal communicably connected to said system controller,

said method comprising the steps of:

receiving, by said system controller, a request for use of a locker unit for said delivery or said pickup of said good;

reserving, by said system controller, said locker unit in response to said receiving step; and

notifying, by said system controller, said customer after said delivery of said good or of said locker unit for drop off of said good for said pickup.

7. The method of Claim 6, wherein said notifying step comprises the step of notifying said vendor or said delivery agent of said drop off.

8. The method of Claim 6, and further comprising the step of registering, by said system controller, particulars of said customer, said vendor, said delivery agent, and delivery persons prior to said receiving step.

9. The method of Claim 8, and further comprising the step of providing, by said system controller, login identification to each of said registered parties based upon particulars received from said registered parties, said

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login identification being associated with a smart card and a pin number of each of said registered parties.

10. The method of Claim 9, and further comprising the step of providing, by said locker controller, said pin number and information on said smart card to said locker controller for said leasing.

11. The method of Claim 6, and further comprising the step of allowing, by said system controller, special access to said locker unit by said registered parties when a wrong delivery or a wrong item is placed into said locker unit.

12. The method of Claim 6, and further comprising the step of renewing a lease period for said locker unit after said lease period runs out.

13. The method of Claim 6, wherein said method further comprises the step of providing a transaction number, by said system controller, to said vendor or said delivery agent after said reserving step.

14. The method of Claim 13, and further comprising the step of receiving, by said system controller, said transaction number and a login identification number associated with a delivery person to enable said delivery of said good or pickup of said drop off of said good.

AMENDED SHEET

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
22 March 2001 (22.03.2001)

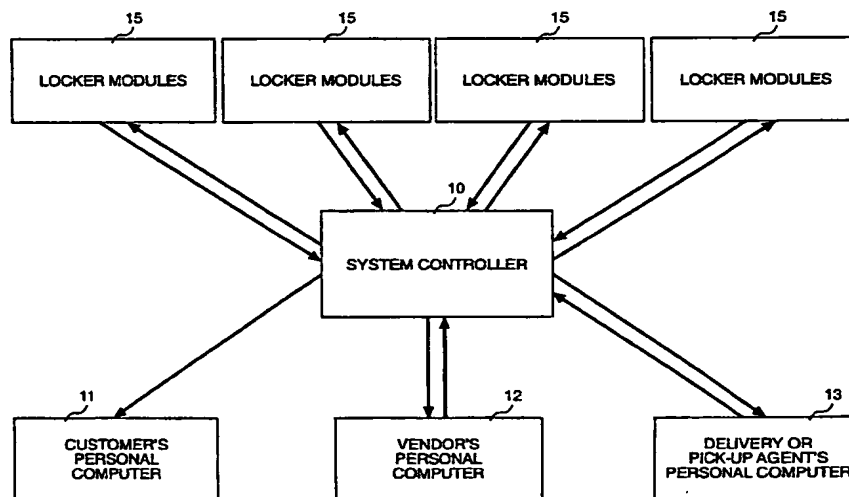
PCT

(10) International Publication Number
WO 01/20423 A2

- (51) International Patent Classification⁷: **G06F** (74) Agent: **LAWRENCE Y. D. HO & ASSOCIATES**; #07-01 Thongsia Building, 30 Bideford Road, Singapore 229922 (SG).
- (21) International Application Number: **PCT/SG00/00143**
- (22) International Filing Date:
12 September 2000 (12.09.2000) (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.
- (25) Filing Language: **English**
- (26) Publication Language: **English**
- (30) Priority Data:
9904582-5 15 September 1999 (15.09.1999) SG (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).
- (71) Applicant (*for all designated States except US*): **FIRST CUBE PTE LTD.** [SG/SG]; 10 Eunoz Road 8, #07-32 Singapore Post Centre, Singapore 408600 (SG).
- (72) Inventor; and
- (75) Inventor/Applicant (*for US only*): **FONG, Fatt, Chee** [SG/SG]; 8 Kheam Hock Road, Singapore 298782 (SG).
- Published:
— *Without international search report and to be republished upon receipt of that report.*

[Continued on next page]

(54) Title: **A METHOD AND SYSTEM FOR FACILITATING DELIVERY AND PICKUP OF GOODS**



(57) Abstract: The present system facilitates delivery and pickup of goods by providing a locker module at a location near a customer's residential site. For a vendor to deliver a good to the customer, the vendor leases a unit in the locker module from the system controller by accessing the system controller's website and providing details of the customer and a delivery agent. The vendor then notifies the delivery agent to make the delivery. The delivery agent provides the system controller the particulars of its delivery person. The designated delivery person accesses the leased locker unit using a registered smart card and delivers the good. The system controller notifies the customer of the delivered good. The customer accesses the locker unit containing the good by using a registered smart card.

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INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
22 March 2001 (22.03.2001)

PCT

(10) International Publication Number
WO 01/020423 A3

(51) International Patent Classification⁷: **G06F 17/60**

(21) International Application Number: PCT/SG00/00143

(22) International Filing Date:
12 September 2000 (12.09.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
9904582-5 15 September 1999 (15.09.1999) SG

(71) Applicant (for all designated States except US): **FIRST CUBE PTE LTD.** [SG/SG]; 10 Eunos Road 8, #07-32 Singapore Post Centre, Singapore 408600 (SG).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:
— with international search report

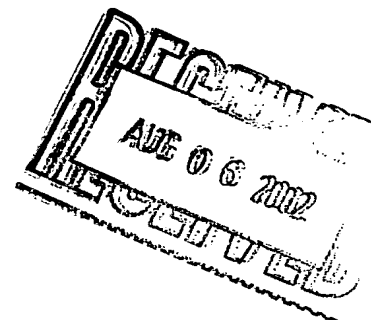
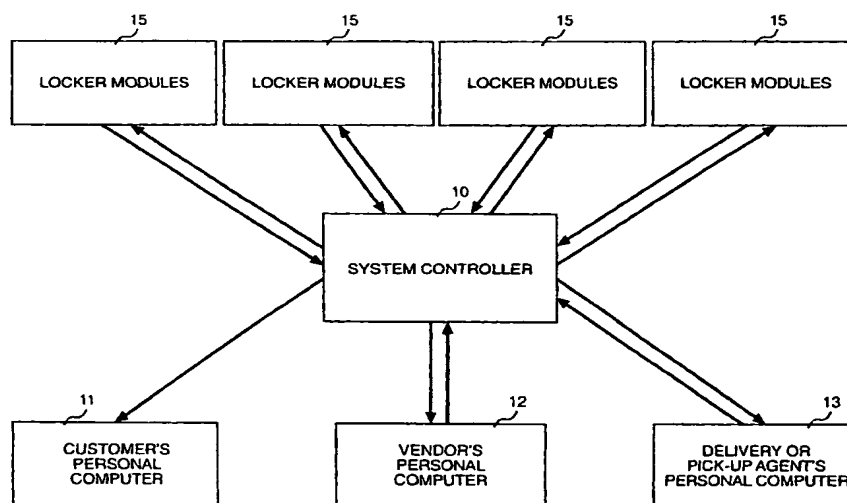
(72) Inventor; and
(75) Inventor/Applicant (for US only): **FONG, Fatt, Chee** [SG/SG]; 8 Kheam Hock Road, Singapore 298782 (SG).

(88) Date of publication of the international search report:
11 July 2002

(74) Agent: **LAWRENCE Y. D. HO & ASSOCIATES:** #07-01 Thongsia Building, 30 Bideford Road, Singapore 229922 (SG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: A METHOD AND SYSTEM FOR FACILITATING DELIVERY AND PICKUP OF GOODS



(57) Abstract: The present system facilitates delivery and pickup of goods by providing a locker module at a location near a customer's residential site. For a vendor to deliver a good to the customer, the vendor leases a unit in the locker module from the system controller by accessing the system controller's website and providing details of the customer and a delivery agent. The vendor then notifies the delivery agent to make the delivery. The delivery agent provides the system controller the particulars of its delivery person. The designated delivery person accesses the leased locker unit using a registered smart card and delivers the good. The system controller notifies the customer of the delivered good. The customer accesses the locker unit containing the good by using a registered smart card.

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/SG 00/00143

CLASSIFICATION OF SUBJECT MATTER

IPC⁷: G06F 17/60

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC⁷:

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WPI, PAJ, EPODOC, EspaceNet, Depatisnet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 298 07 184 U1 (Müller), 24 September 1998 (24.09.98) <i>see the whole document, esp. fig. 1, fig. 2.</i>	1-3
Y		4-9
Y	DE 41 30 033 A1 (ACCUMULATA), 18 March 1993 (18.03.93) <i>see the whole document, esp. fig. 1.</i>	4-9
A		1-3

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

* Special categories of cited documents:

„A“ document defining the general state of the art which is not considered to be of particular relevance

„E“ earlier application or patent but published on or after the international filing date

„L“ document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

„O“ document referring to an oral disclosure, use, exhibition or other means

„P“ document published prior to the international filing date but later than the priority date claimed

„T“ later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

„X“ document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

„Y“ document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

„&“ document member of the same patent family

Date of the actual completion of the international search

21 January 2002 (21.01.2002)

Date of mailing of the international search report

22 January 2002 (22.01.2002)

Name and mailing address of the ISA/AT

Austrian Patent Office
Kohlmarkt 8-10; A-1014 Vienna

Facsimile No. 1/53424/535

Authorized officer

FASTENBAUER

Telephone No. 1/53424/447

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/SG 00/00143

Patent document cited in search report			Publication date	Patent family member(s)		Publication date
DE	U1	29807184	24-09-1998	none		
DE	A1	4130033	18-03-1993	AT	E	15-03-1998
DE	C2	4130033	19-10-1995	DE	C0	09-04-1998
				DK	T3	30-11-1998
				EP	A2	17-03-1993
				EP	A3	14-07-1993
				EP	B1	04-03-1998
				ES	T3	01-07-1998